



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/564,297

01/10/2006

Job Cornelis Oostveen

2167.052US1

7965

21186

7590

12/22/2010

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.

P.O. BOX 2938

MINNEAPOLIS, MN 55402

EXAMINER

PICH, PONNOREAY

ART UNIT

PAPER NUMBER

2435

NOTIFICATION DATE

DELIVERY MODE

12/22/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com

request@slwip.com

Office Action Summary	Application No. 10/564,297	Applicant(s) OOSTVEEN ET AL.	
	Examiner Ponnoreay Pich	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,8-14 and 18-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,8-14 and 18-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-4, 8-14, and 18-27 are pending.

Information Disclosure Statement

Regarding the IDS filed on 8/4/10, the Japanese Application listed was not considered as it is only in Japanese, thus does not comply with 37 CFR 1.98(a)(3). The examiner cannot consider the content as the examiner cannot read Japanese. All other references were considered.

Response to Amendment

Applicant's amendments were fully considered. Any objections/rejections not repeated for record were withdrawn due to applicant's amendments. Any new objections/rejections made below were necessitated by applicant's amendments.

Response to Arguments

Applicant's arguments with respect to the amended claims were fully considered, but are moot in view of new rejections made below. Note that in reviewing applicant's citation for support for the new limitations, it would appear that several of the citations from applicant's specification were in fact admitted prior art (i.e. citations including paragraphs found on p1, line 11-p2, line 15). As such, while Rhoads does not specifically teach the some of the limitations applicant has added onto the claims, these limitations were nonetheless admitted prior art and when viewed in combination with Rhoads, the claims are obvious. See further clarification below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2435

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

1. As per claims 22, 24, and 26, there does not appear to be written description support for the limitation that "the action corresponds to the specific content shown in only the segment among the plurality of segments of the multimedia signal". From the disclosure, while it is accepted that the action corresponds to specific content found in a segment, there is nothing which prohibits the action from also correspond to other segments in the multimedia signal.
2. As per claims 23, 25, and 27, there does not appear to be written description support for the limitation that "the action corresponds to the specific content shown in the segment based on the content being relevant to only the segment among the plurality of segments of the multimedia signal". From the disclosure, while it is accepted that the action corresponds to specific content shown in a segment based on the content being relevant to the segment, there does not appear to be anything which prohibits the content being also relevant to other segments.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8-14, and 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads et al (US 2002/0032864) in view of applicant's admitted prior art as discussed in the specification of the current application as originally filed (herein after "AAPA") **or alternatively**, AAPA in view of Rhoads et al (US 2002/0032864).

Claims 1, 11, and 21:

As per claim 1, Rhoads discloses:

1. Providing a trigger time point of a plurality of trigger time points within a multimedia signal, the trigger time point corresponding to a segment of a plurality of segments of the multimedia signal (paragraphs 14, 21, and 27—*Each short time window from which a fingerprint can be derived is considered a trigger time point because the fingerprint derived from the time window belonging to the audio track is used to trigger any number of different responses. Note that plural fingerprints can be derived from plural time windows of the same audio track. This means that an audio track has a plurality of trigger time points.*).
2. Deriving a fingerprint based on the segment of the multimedia signal (paragraphs 14 and 21).

3. Associating the derived fingerprint with the action (paragraph 27).

AAPA discloses that at the time applicant's invention was made, it was well known in the art for a multimedia signal to have a plurality of trigger time points within the multimedia signal (p1, lines 11-13 and p1, line 19-p2, line 13). The cited section also shows it was well known in the art that a trigger time point corresponds to a segment of a plurality of segments of the multimedia signal; each segment of the plurality of segments being identified by one of the plurality of trigger time points and corresponding to specific content to be shown to a user; and providing a representation of an action that corresponds to the specific content to be shown in the segment of the multimedia signal, the trigger time point indicating a time point within the multimedia signal at which the action is to be triggered during a playback of the multimedia signal.

At the time applicant's invention was made, it would have been obvious to one skilled in the art to combine Rhoads and AAPA's teachings (or alternatively AAPA and Rhoads's teachings) according to the limitations recited in claim 1. One skilled would have combined Rhoads and AAPA's teachings (or vice versa) by utilizing fingerprints of specific portions of a multimedia content as taught by Rhoads as trigger time points which would trigger an action corresponding to content specific to the segments of the multimedia signal and provide a representation of the action as per AAPA's teachings. The rationale for why it would have been obvious to modify Rhoads's invention utilizing AAPA's teachings so that rather than merely trigger an action upon identification of a multimedia signal, one or more actions specific to the signal's content were instead

Art Unit: 2435

allowed to be triggered based on identification of specific fingerprints in the content is because as taught by AAPA, current trend at the time applicant's invention was made was to enhance passive tv viewing or music listening on playback devices by creating more interactive experiences (p1, lines 11-13). The rationale for why it would have been obvious to utilize fingerprints of content segments as taught by Rhoads within the prior art inventions discussed by AAPA as trigger time points is that doing so is nothing more than simple substitution of one known element (i.e. type of trigger) for another to achieve predictable results.

The rejection of claim 1 applies, *mutatis mutandis*, to claims 11 and 21. Claim 11 is directed towards a device fingerprint module implement in hardware, the fingerprint module being configured to implement the method of claim 1. One skilled should appreciate that Rhoads's invention as well as the prior art inventions discussed in AAPA's disclosure are computer implemented, one can consider the processor(s) found in the computer of Rhoads-AAPA's (or alternatively AAPA-Rhoads's) combination invention as the claimed fingerprint module. One skilled should appreciate that all computers have at least one processor. Claim 21 is directed towards a non-transitory computer readable storage medium comprising instructions that when executed, cause one or more processors of the device of claim 21 to implement the method of claim 1.

Claims 2 and 12:

As per claim 2, Rhoads further discloses storing at least one of the derived fingerprint or the representation of the action in a first database (paragraphs 27 and 30-31). The rejection of claim 2 applies, *mutatis mutandis*, to claim 12.

Art Unit: 2435

Claims 3 and 13:

As per claim 3, Rhoads further discloses transmitting at least one of the derived fingerprint or the representation of the action to a playback device (paragraph 27). The rejection of claim 3 applies, *mutatis mutandis*, to claim 13.

Claims 4 and 14:

Rhoads further discloses the trigger time point corresponds to at least one of a start of the segment, an end of the segment, a predetermined distance from the start of the segment, or a predetermined distance from the end of the segment (paragraphs 14 and 21).

Claims 8 and 18:

Rhoads further discloses wherein the multimedia signal includes at least one of an audio signal or video signal (paragraphs 21 and 34).

Claims 9 and 19:

Rhoads further discloses wherein the action is selected from a group consisting of: retrieving and displaying additional information on a display, retrieving and playing additional information via a speaker, playing another multimedia signal instead of the multimedia signal for a period of time, interrupting the playback of the multimedia signal, executing control commands, and preparing a system for user inputs (paragraph 27). AAPA also discloses the limitation (p1, lines 11-13 and p1, line 19-p2, line 13).

Claims 10 and 20:

As per claim 10, Rhoads further discloses storing at least one of the derived fingerprint or the representation of the action in a second database; and wherein the

Art Unit: 2435

derived fingerprint is at least one of an audio fingerprint or a video fingerprint (paragraphs 9, 14, 21, and 31). The rejection of claim 10 applies, *mutatis mutandis*, to claim 20.

Claims 22, 24, and 26:

AAPA further discloses the action corresponds to the specific content shown in only the segment among the plurality of segments of the multimedia signal (p1, lines11-13 and p1, line 19-p2, line 13; *Biographical data made available for actor shown in specific segment of content*).

Claims 23, 25, and 27:

AAPA further discloses the action corresponds to the specific content shown in the segment based on the content being relevant to only the segment among the plurality of segments of the multimedia signal (p1, lines11-13 and p1, line 19-p2, line 13).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2435

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is (571) 272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ponnoreay Pich/
Primary Examiner, Art Unit 2435